PASSAGE PLAN

prepared in accordance to IMO Resolution A.893(21)
(in case of plan alternation a new plan to be prepared)

Passage description:

M/V AP DRZIC..... Voy. No.06/14 TCH 02/14 Date 14.07.2014.....
From MUNDRA..... Via ..... To NEW ORLEANS...

Departure draft:	F	8,55 mtr	Arrival draft:	F	8,64..... mtr
	M	8,74 mtr		M	8,93..... mtr
	A	8,93 mtr		A	9,21... mtr

Total Distance Pilot to Pilot: .....13164.....Nm Speed: .....13,8.....

Sailing times:	@.. 14....kts	days..39 .hrs...4..	Dep Time Zone: GMT..+ 5,5..
	@...13....kts	days...42.hrs...4...	Arr Time Zone: GMT....- 5.....
	@...12....kts	days...45.hrs...17.	Time change: Hours.....10,5.

Bunkers required for voyage:	FO.1291,76 MT	DO/GO...../.....MT
Bunkers on departure:	FO.1622,80.MT	DO/GO...42,45 ..MT
Bunkers to be taken on voyage:	FO...../.....MT	DO/GO...../.....MT

Sufficient Bunkers available for voyage in accordance with SOM/TEC/SEC.008 **Yes/No**

Comments: (safe speed in special areas, areas limited to daily navigation or good visibility, use of Weather Routeing, Port of refugee if required)

DEPARTURE MUDRA, MUNDRA P.S., GULF KACHI, OUT OF HRA, GALEOS PASSAGE, YUCATAN CHANEL, *NORTH AMERICA ECA ZONE*, ARRIVAL PILOT STATION NEW ORLEANS

Kind of cargo on board: STEEL BARE PIPES Quantity: .14570,297 .....MT

DECLARATION:

This passage plan (from berth to berth) has been prepared in accordance with the requirements of *IMO Resolution A.893(21)* and approved by the Master.

Undersigned Bridge Team have been familiarized with the Plan and the Plan is to be followed during entire voyage, monitored and reviewed as neccessary.

Ch Off/.....2nd Off/.....3rd Off/.....
/Navigation Officers familiarized with the Plan/

Master:

PASSAGE APPRAISAL

Ship and equipment	Y	N	**Nautical charts / publications**	Y	N
Ship's stability is OK	V		Appropriate scale, accurate and up to date charts to be used	V	
Navigation equipment ready	V		Accurate and up to date Sailing Directions, List of lights and ALRS	V	
Ship's propulsion plant operable	V		Last available NTM and existing radio navigational warnings	V	
Ship's power supply system operable	V		Notice to mariners receiving equipment ready (Navtex, EGC)	V	
Emrgency equipment ready	V		Mariner's routing guides and passage planning charts	V	
Manoeuvring characterisstics according to manoeuvring diagram	V		Climatological, hydrographical, oceanographic data and other informations	V	
Any limitations which can have effect to safety of navigation*		V	Use of Weather Routeing Service planned?	V	
Cargo			Ship's routeing and reporting system, VTS and marine environmental protection	V	
Special characteristics of the cargo	V		Volume of traffic likely to be encountered throughout the voyage	V	
Distribution, stowing and securing of the cargo	V		Information relating to pilotage, embarkation and disembarkation including exchange of information with the pilot	V	
Crew			**Ports**		
The provision of a competent crew	V		Available port information including availability of shore based emergency response	V	
The crew is well rested	V		**Fuel, Spares, Stores**		
Certificates and documents			Spares and stores enough for the next voyage		
Ship's certificates and documents valid for the next voyage	V		Fuel and lubricants enough	V	
Equipment certificates valid	V		**Other**		
Crew certificates, documents, visas, etc. valid	V		Other information taken into consideration related to the cargo, ship, special trading areas and type of	V	
Crew vaccination certificates valid	V				
Cargo documents valid	V				

Based on the passage appraisal the following danger area(s) was determined (marked on chart):
DANGER AREAS BASED ON APPRAISAL DETERMINED BY MASTER

Based on the passage appraisal the following area(s) was determined as special environment protection areas:
CARIBEAN SEA

*Note limitations:
NONE

The following factors was included in the detailed passage plan *(after performing and verification the appropriate box to be ticked):*

	Initials
The ploting of the intendend route of the voyage on appropriate scale charts together with:	
• indication of the true direction of the planned route;	H.K.
• indication of all dangerous areas with limits of minimum requested safety meauseres;	H.K.
• notation of existing ship's routeing and reporting system (i.e. AMVER, AUSREP) on the large scale charts with reporting frequency;	H.K.
• notation of an VTS system with communication channels;	H.K.
• areas where marine environmental protection considerations apply.	H.K.
The main elements to ensure safety of life at sea, safety and efficiency of navigation and protection of the environment such as but not limited to:	
• safe speed, having regard to the proximity of navigational hazards, manoevring characteristics of the vessel and;	H.K.
• necessary speed alternation en route, e.g. due to night passage, tidal restrictions, increase of draught due to squat or heel effect;	H.K.
• minimum underkeel clearance in critical areas with restricted depth;	H.K.
• course alteration points, taking into account the vessel's turning circle at the planned speed and any expected effect of tidal streams and currents;	H.K.
• position where a change in machinery status is required (mark on chart);	H.K.
• method and frequency of position fixing, including primary and secondary options, indicating critical areas where max reliability must be obtained;	H.K.
• parallel index, abort line and contingency anchorage(s) defined and clearly marked on charts;	H.K.
• use of ship's routeing and reporting systems and VTS;	H.K.
• consideration relating to the protection of the marine environment;	H.K.
• contingency plan for alternative action to place the vessel in deep water or proceed to to a port of refugee or safe anchorage in the event of any emergency case of abandonment of the plan. Existing shore based emergency response arrangements and equipment, nature of cargo and emergency itself taken into account.	H.K.

Passage plan should be reviewed and discussed by the Bridge Team (including the pilot) when the pilot boards the ship. Any changes foreseen at that time should be evaluated, plotted on the chart, and made known to the all Bridge Team.

Changes to passage plan should be evaluated to determine their impact on the composition and duties of the Bridge Team. Communication is critical to the Bridge Team. It maintains the situational awareness of the Bridge Team and ensures that developing error chains are interrupted. Standing orders should be consistently followed.

LIST OF USED NAUTICAL CHARTS AND PUBLICATIONS

(including NTM recived via NAVTEX-a or EGC):

Last BA NTM on board:	26 / 14	Charts Corrected up to NTM	26 / 14

Chart/ Edition	Corrections inserted or Last correction	Chart/ Edition	Corrections inserted or Last correction
652 June 2013	1805 - 2014	578 DEC 2005	1518 – 2014
651 June 2013	1805 - 2014	4153 JUL 2001	1518 – 2014
682 June 2012	2440 - 2014	4156 SEP 2001	557 – 2014
670 Feb. 2011	2440 - 2014	4159 OCT 2005	558 – 2014
39 Nov. 2008	1253 – 2014	4202 Feb. 2011	2483 – 2013
1470 Nov. 2008	926 – 2014	4204 Aug. 2010	Aug. 2010
1474 Nov. 2008	2485 – 2014	528 Mar. 2011	2559 – 2014
1486 Nov. 2008	2485 – 2014	520 Mar. 2011	1491 – 2014
2736 Nov. 2008	2485 – 2014	1044 Jan. 2011	763 – 2014
707 July 2013	3930 – 2013	1218 FEB 2012	1628 – 2014
1487 NOV 2008	2485 – 2014	1220 FEB 2012	3265 – 2013
1508 NOV 2008	4366 – 2013	2579 JAN 2002	646 – 2014
1509 SEP 1992	2096 – 2013	3851 MAR 2012	1958 – 2014
1564 MAY 1999	2443 – 2014	3857 Dec. 2012	2451 – 2014
1565 MAR 1994	3944 – 2013	3382 MAY 2009	4836 – 2013
1566 JUL 1995	3944 – 2013	4401 NOV 2010	1326 – 2014
1587 OCT 1995	2706 – 2013	4402 Jan. 2014	706 – 2014
709 FEB 1994	1623 – 2013	4400 OCT 2010	1326 – 2014
708 NOV 2008	3931 – 2013	4216 Dec. 2010	1491 – 2014
828 APR 1987	3145 – 2013	4713 Aug. 2010	Aug. 2010
4706 SEP 2011	3931 – 2013	4701 Aug. 2010	1020 – 2014
4702 AUG 2010	4328 – 2013	4072 Aug. 2010	1693 – 2014
712 Feb. 2002	4592 – 2013	4012 Sept.2011	1814 – 2014
4700 AUG 2010	4646 – 2013		
2095 DEC 2005	557 – 2014		

Publications: (with corrections inserted or last correction)	
Sailing directions:	NP 38, NP 39, NP 3, NP 2, NP 7A, NP 70, NP 69A
ALRS:	NP 281 (1),(2), NP282, NP 283 (1),(2), NP 284, NP 285, NP 286 (4), (3), (7), (5)
List of Lights:	NP 79 F, NP 77 D, NP 80 G, NP 82 J
Tidal tables & Atlases:	NP 202, NP 203,

- Passage plan is to be completed and approved from the Master prior to departure from port.
- Passage plan must be available on the chart table at all times for reference by the duty navigation officer. The progress of the vessel in accordance with the voyage or passage plan should be closely and continuously monitored.
- Any changes made in the Plan should be made consistent, clearly marked and recorded.

PASSAGE PLAN – VOYAGE SUMMARY

Ship:	AP DZIC		
From:	MUNDRA	ETD:	15.07.2014
To:	NEW ORLEANS	ETA:	26.08.2014

Way point list (should include berth to berth waypoints):

WP #	Waypoint φ (N / S) & λ (E / W)		True Course	Distance	Distance to go	Frequency of Position Fixing	Prefered method of position fixing
1.	22° 44,00 'N	069° 42,60 'E	*155*	*1,98*	*13166,62*	*5'*	***MUNDRA PORT***
2.	22° 42,20 'N	069° 43,50 'E	231	8,22	13164,64	*15'*	***GPS-ARPA***
3.	22° 37,00 'N	069° 36,60 'E	292	4,37	13156,42	*15'*	***GPS-ARPA***
4.	22° 38,60 'N	069° 32,20 'E	263	4,27	13152,05	*15'*	***GPS-ARPA***
5.	22° 38,10 'N	069° 27,60 'E	252	8,35	13147,78	*15'*	***GPS-ARPA***
6.	22° 35,50 'N	069° 19,00 'E	263	2,60	13139,43	*15'*	***GPS-ARPA***
7.	22° 35,20 'N	069° 16,20 'E	299	6,77	13136,83	*15'*	***GPS-ARPA***
8.	22° 38,50 'N	069° 09,80 'E	270	8,21	13130,06	*15'*	***GPS-ARPA***
9.	22° 38,50 'N	069° 00,90 'E	246	3,73	13121,85	*15'*	***GPS-ARPA***
10.	22° 37,00 'N	068° 57,20 'E	225	3,12	13118,12	*15'*	***GPS-ARPA***
11.	22° 34,80 'N	068° 54,80 'E	202	21,4	13115,0	*15'*	***GPS-ARPA***
12.	22° 15,00 'N	068° 46,00 'E	162	40,0	13093,6	*30'*	***GPS-ARPA***
13.	21° 37,00 'N	068° 59,50 'E	136	134	13053,6	*30'*	***GPS-ARPA***
14.	19° 46,00 'N	070° 19,00 'E	143	64,2	12919,6	*30'*	***GPS-ARPA***
15.	18° 54,80 'N	071° 00,00 'E	146	211	12855,4	*60'*	***GPS-ARPA***
16.	16° 00,00 'N	073° 04,00 'E	158	387	12644,4	*60'*	***GPS-ARPA***
17.	10° 00,00 'N	075° 30,00 'E	144	149	12257,4	*60'*	***GPS-ARPA***
18.	08° 00,00 'N	077° 00,00 'E	115	70,2	12108,4	*120'*	***GPS-ARPA***
19.	07° 30,00 'N	078° 04,00 'E	180	1170	12038,2	*120'*	***GPS-ARPA***
20.	12° 00,00 'S	078° 00,00 'E	244	3069	10868,2	*120'*	***GPS-ARPA***
21.	34° 20,00 'S	027° 30,00 'E	264	257	7799,2	*60'*	***GPS-ARPA***
22.	34° 46,00 'S	022° 20,00 'E	262	116	7542,2	*60'*	***GPS-ARPA***
23.	35° 03,00 'S	020° 00,00 'E	283	101	7426,2	*60'*	***GPS-ARPA***
24.	34° 40,00 'S	018° 00,00 'E	302	3463	7325,2	*120'*	***GPS-ARPA***
25.	04° 30,00 'S	035° 00,00'W	297	603	3862,2	*60'*	***GPS-ARPA***
26.	00° 00,00 'N	044° 00,00'W	311	637	3259,2	*60'*	***GPS-ARPA***
27.	07° 00,00 'N	052° 00,00'W	294	581	2622,22	*60'*	***GPS-ARPA***
28.	11° 00,00 'N	060° 56,00'W	296	1023	2041,2	*60'*	***GPS-ARPA***
29.	18° 35,00 'N	076° 45,00'W	287	457	1018,2	*60'*	***GPS-ARPA***
30.	20° 45,00 'N	084° 30,00'W	312	81,8	561,2	*60'*	***GPS-ARPA***
31.	21° 40,00 'N	085° 35,00'W	334	282	479,4	*60'*	***GPS-ARPA***
32.	25° 55,00 'N	087° 49,00'W	334	181	197,4	*60'*	***ECA ZONE***
33.	28° 37,40 'N	089° 17,20'W	328	13,2	16,4	*15'*	***GPS-ARPA***
34.	28° 48,60 'N	089° 25,20'W	358	3,20	3,20	*5'*	***GPS-ARPA***
35.	28° 51,80 'N	089° 25,30'W			000,0	*5'*	***GPS-ARPA***
36.							

UNDER KEEL CLEARANCE CALCULATION

Ship's Name	AP DRZIC
Port	MUNDRA
Date	14.07.2014
Time	03 00 LT

Section 1 – Deepest Navigational Draft

		Facility	Anchorage	Transit Area	
1	Mean Draft	8,74	8,74	8,74	Mtrs
2	Trim	0,38	0,38	0,38	Mtrs
3	Increase Draft Due List	-	-	-	Mtrs
4	Intended Transit Speed	4	8	11,5	Knts
5	Anticipated Squat*	0,23	0,53	0,96	Mtrs
6	FW/DW Allowance	-	-	-	Mtrs
7	Corrected Maximum Draft	9,35	9,65	10,08	Mtrs

Section 2 – Anticipated Controlling Depth

		Facility	Anchorage	Transit Area	
8	Chart Depth	14,2	25,5	37,5	Mtrs (Min)
9	Height of Tide	3,5	3,5	3,5	Mtrs (+ or -)
10	Sea State	CALM	CALM	CALM	Mtrs (+ or -)
11	Past Weather Impact	-	-		Mtrs (+ or -)
12	Controlling Depth^{+}	17,7	29,0	41,0	Mtrs

$^{+}$ or listed controlling depth from the latest data

Section 3 – Anticipated Under Keel Clearance

		Facility	Anchorage	Transit Area	
7	Maximum Draft	9,35	9,65	10,08	Mtrs
12	Controlling Depth	17,7	29,0	41,0	Mtrs
13	Under Keel Clearance	8,35	19,35	30,92	Mtrs
14	Port UKC Requirements	1,0	1,0	1,0	Mtrs
15	Ship Complies	YES	YES	YES	Yes/No

*Squat calculation methods

1. Open water condition: Max. Squat = $C_B \times V_K^2/100$ (mtrs)
2. Confined water condition: Max. Squat = $2C_B \times V_K^2/100$ (mtrs)

Where, C_B = Block Coefficient, V_k = Vessel's speed in knots

Master

Note: Under Keel Clearance Calculation form to be completed for all arrivals and departures